

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A bale loading arm for use with a bale carrier having a longitudinal axis said loading arm comprising:

- (a) a loading frame having a proximal end and a distal end, wherein said loading frame engages the bale carrier at its proximal end and said loading frame pivots about a substantially horizontal axis which is substantially parallel to the longitudinal axis of the carrier[;], the loading frame including a support leg disposed toward the distal end of the loading frame for supporting the distal end thereof;
- (b) means for pivoting the loading frame;
- (c) a pivot member rotatably engaging the distal end of the loading frame, wherein said pivot member is substantially parallel to the pivot axis of the loading frame and is rotatable along a pivot member longitudinal axis;
- (d) means for rotating the pivot member; and
- (e) a bale grasper opening in a direction parallel to the longitudinal axis of the bale carrier having a grasper arm and grasping means ~~affixed~~ affixed to the grasper arm; wherein the grasper arm is rotatably mounted to the pivot member about a grasper arm axis extending perpendicular to said pivot member axis, extending outward from the loading frame and includes means for rotating the grasper arm.

Claim 2. (Original) The bale loading arm of claim 1 wherein the grasping means comprises a pair of opposed paddles, one of which is moveable between an open bale receiving position and a closed bale grasping position, and means for moving the moveable paddle.

Claim 3. (Original) The bale loading arm of claim 2 wherein the pair of opposed paddles extends from the grasping arm in the forward direction such that the bale carrier may be moved forward to position a bale within the bale grasping means.

Claim 4. (Original) The bale loading arm of claim 2 wherein the paddle moving means comprises a hydraulic cylinder disposed between the grasper arm and the paddle.

Claim 5. (Original) The bale loading arm of claim 1 wherein the loading frame is moved by a hydraulic cylinder and ram attached between the bale carrier and an articulating lever arm wherein said lever arm is attached to the bale carrier and the loading frame.

Claim 6. (Original) The bale loading arm of claim 1 wherein the pivot member rotation means comprises an orbit motor and chain drive.

Claim 7. (Original) The bale loading arm of claim 1 wherein the pivot member rotation means comprises a hydraulic cylinder and lever arm.

Claim 8. (Original) The bale loading arm of claim 1 wherein the grasping arm rotation means comprises an orbit motor and chain drive configuration.

Claim 9. (Original) The bale loading arm of claim 1 wherein the grasping arm rotation means comprises a hydraulic cylinder and lever arm.

Claim 10. (Currently Amended) A bale loading arm for use with a bale carrier having a longitudinal axis, said loading arm comprising:

- (a) a first member having a proximal end and a distal end which extends laterally outward from the bale carrier and which pivots about a substantially horizontal axis substantially parallel to the longitudinal axis of the bale carrier[;], the first member including a support leg disposed toward the distal end of the first member for supporting the distal end thereof;
- (b) means for pivoting the first member;
- (c) a second member having a longitudinal axis which rotatably and pivotally engages the distal end of the first member such that the second member rotates and ~~pivot~~ pivots about a second axis orthogonal to said second member longitudinal axis and parallel to the pivot axis of the first member, said second member also being rotatably mounted to said distal end of the first member for rotation about said second member longitudinal axis;
- (d) means for rotating the second member about the second member longitudinal axis;
- (e) means for pivoting the second member about the second axis; and
- (f) bale grasping means affixed to the second member for grasping the bale and opening in a direction parallel to said bale carrier longitudinal axis.

Claim 11. (Original) The bale loading arm of claim 10 wherein the grasping means comprises a pair of opposed paddles, one of which is moveable between an open bale receiving position and a closed bale grasping position and means for moving one paddle.

Claim 12. (Original) The bale loading arm of claim 11 wherein the pair of opposed paddles extends from the second member in the forward direction such that the bale carrier may be moved forward to position a bale within the bale grasping means.

Claim 13. (Original) The bale loading arm of claim 11 wherein the paddle moving means comprises a hydraulic cylinder disposed between the second member and the paddle.

Claim 14. (Original) The bale loading arm of claim 10 wherein the first member pivot means comprises a hydraulic cylinder and ram attached between the bale carrier and an articulating lever arm wherein said lever arm is attached to the bale carrier and the first member.

Claim 15. (Original) The bale loading arm of claim 10 wherein the second member rotation means comprises an orbit motor and chain drive.

Claim 16. (Original) The bale loading arm of claim 10 wherein the second member rotation means comprises a hydraulic cylinder and lever arm.

Claim 17. (Original) The bale loading arm of claim 10 wherein the second member pivot means comprises an orbit motor and chain drive configuration.

Claim 18. (Original) The bale loading arm of claim 10 wherein the second member pivot means comprises a hydraulic cylinder lever arm.

Claim 19. (Currently Amended) A bail loader comprising:
a bail carrier having a longitudinal axis, a front end and a longitudinally opposed rear end,
a loading frame having a proximal end and a distal end, said loading frame engaged to said bale carrier at said proximal end, said loading frame adapted to pivot about a substantially horizontal loading frame axis substantially parallel to said longitudinal axis;
a support leg fixed to the distal end of said loading frame for supporting the distal end thereof,
means for pivoting said loading frame;
a pivot member rotatably engaged to said distal end of said loading frame, wherein said pivot member is substantially parallel to the pivot axis of the loading frame and is rotatable along a pivot member axis;
means for rotating said pivot member,
a bale grasper opening in a direction parallel to said longitudinal axis of the bale carrier, said bale grasper including a grasper arm, said grasper arm including a grasping means, said grasper arm rotatably mounted to said pivot member about a grasper arm axis extending perpendicular to said pivot member axis, said bale grasper extending outward from said loading frame and including means for rotating said grasper arm,
a pivot deck pivotally engaged with said rear end of said bale carrier,
means for pivoting said pivot deck between a horizontal position substantially coplanar with said bale carrier and a vertical position substantially perpendicular to said bale carrier, and

bale retaining members extending perpendicularly from an upper surface of said pivot deck.

Claim 20. (Original) The bale loader of claim 19 further comprising means for moving said bales along said bale retaining members.

Claim 21. (Original) The bale loader of claim 19 further comprising means for moving said bales along the length of said carrier.

Claim 22. (Original) The bale loader of claim 19 further comprising means for moving bales along the length of said pivot deck.

Claim 23. (Currently Amended) A bale loader comprising:
a bale loading arm attached to a bale carrier, said loading arm including a first member
projecting laterally outward from said bale carrier, said first member pivotable about a
substantially horizontal axis,
a support leg disposed toward the outward end of said first member for supporting the outward
end of said first member,
means for pivoting said first member,
a second member projecting from said first member and pivotable about an axis proximate to
the juncture of said first and second members, said second member including spaced bale
grasper elements selectively moveable toward and away from one another, said grasper
elements forming an opening parallel to the longitudinal axis of said bale carrier,
means for pivoting said second member,

a pivot deck for loading and unloading bales, said pivot deck pivotally engaged with said bale carrier,

means for pivoting said pivot deck between a horizontal position substantially coplanar with said bale carrier and a vertical position substantially perpendicular to said bale carrier,

bale retaining members attached to said pivot deck, said bale retaining members extending perpendicularly from an upper surface of said pivot deck,

means for pushing said bales along said bale retaining members when said pivot deck is perpendicular to said bale carrier[;],

carrier conveyor means for moving said bales along the length of said bale carrier[;], and

pivot deck conveyor means for moving said bales along the length of said pivot deck.

Claim 24. (Original) The bale loader of claim 23 wherein said bale retaining members are adapted to extend vertically upwards when said pivot deck is in said horizontal position and to extend horizontally outward when said pivot deck is in said perpendicular position.

Claim 25. (Original) The bale loader of claim 23 wherein said carrier conveyor means comprises a chain conveyor.

Claim 26. (Original) The bale loader of claim 23 wherein said pivot deck conveyor means comprises a chain conveyor.